FIG.1

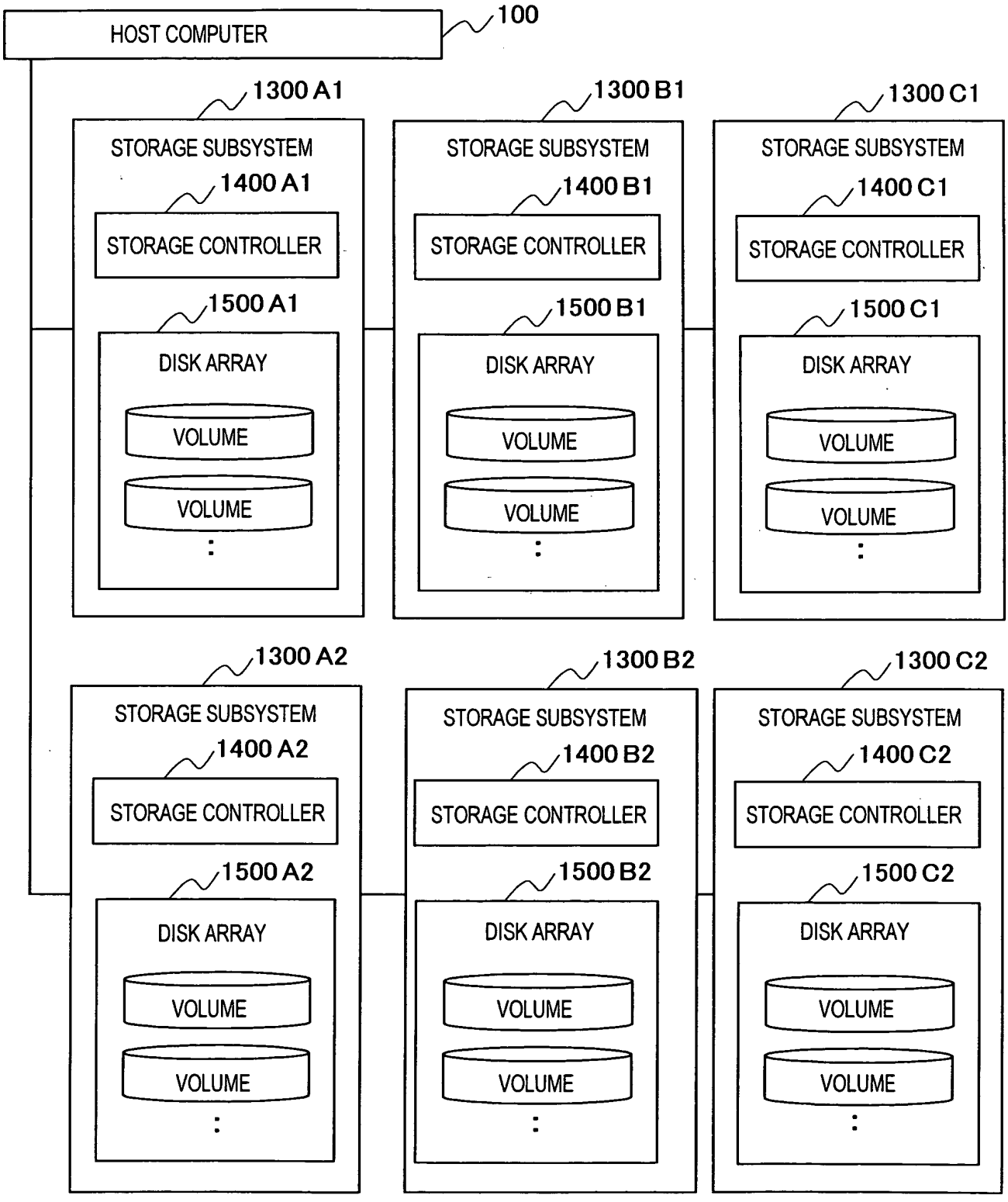

HOST COMPUTER
100
1300 A1
STORAGE SUBSYSTEM
1400 A1
STORAGE CONTROLLER
1500 A1
DISK ARRAY
VOLUME
VOLUME
1300 B1
STORAGE SUBSYSTEM
1400 B1
STORAGE CONTROLLER
1500 B1
DISK ARRAY
VOLUME
VOLUME
1300 C1
STORAGE SUBSYSTEM
1400 C1
STORAGE CONTROLLER
1500 C1
DISK ARRAY
VOLUME
VOLUME
1300 A2
STORAGE SUBSYSTEM
1400 A2
STORAGE CONTROLLER
1500 A2
DISK ARRAY
VOLUME
VOLUME
1300 B2
STORAGE SUBSYSTEM
1400 B2
STORAGE CONTROLLER
1500 B2
DISK ARRAY
VOLUME
VOLUME
1300 C2
STORAGE SUBSYSTEM
1400 C2
STORAGE CONTROLLER
1500 C2
DISK ARRAY
VOLUME
VOLUME

FIG.2

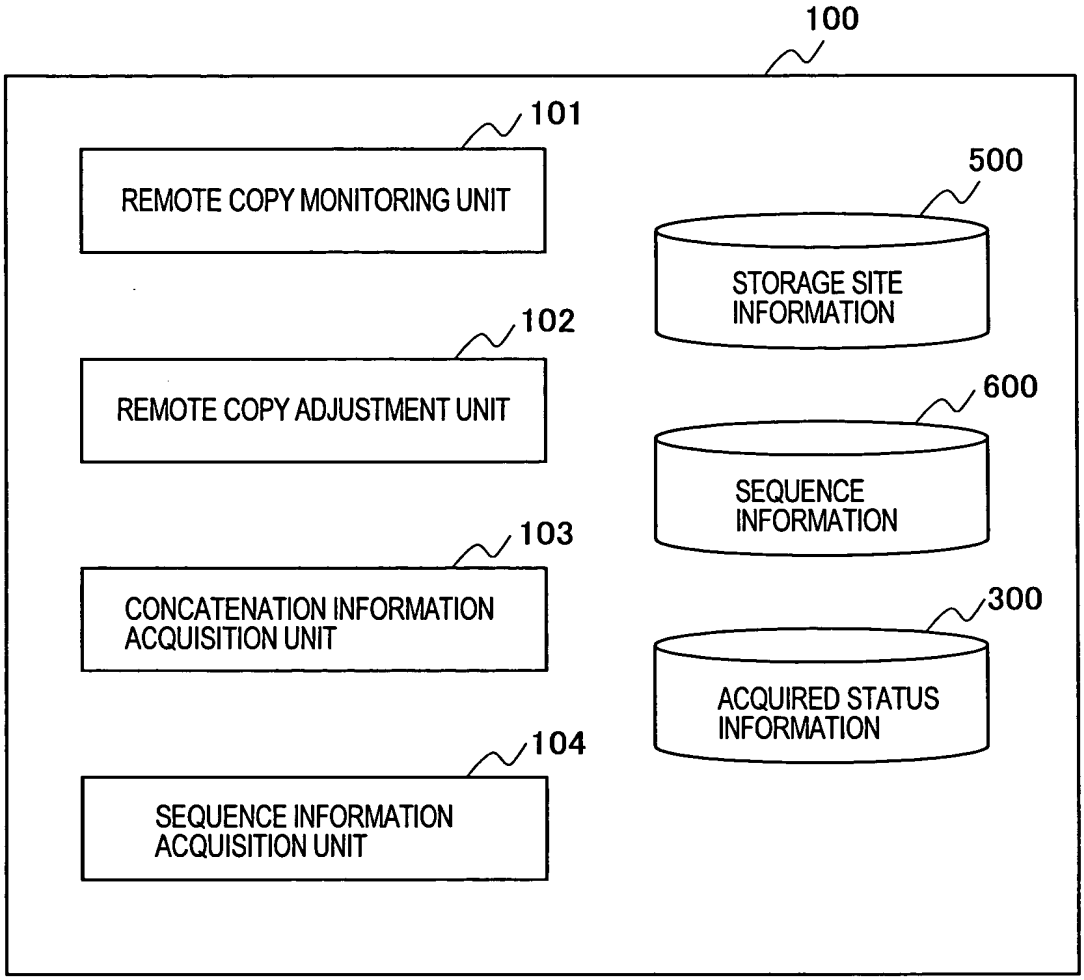

100
101
REMOTE COPY MONITORING UNIT
102
REMOTE COPY ADJUSTMENT UNIT
103
CONCATENATION INFORMATION ACQUISITION UNIT
104
SEQUENCE INFORMATION ACQUISITION UNIT
500
STORAGE SITE INFORMATION
600
SEQUENCE INFORMATION
300
ACQUIRED STATUS INFORMATION

FIG.3

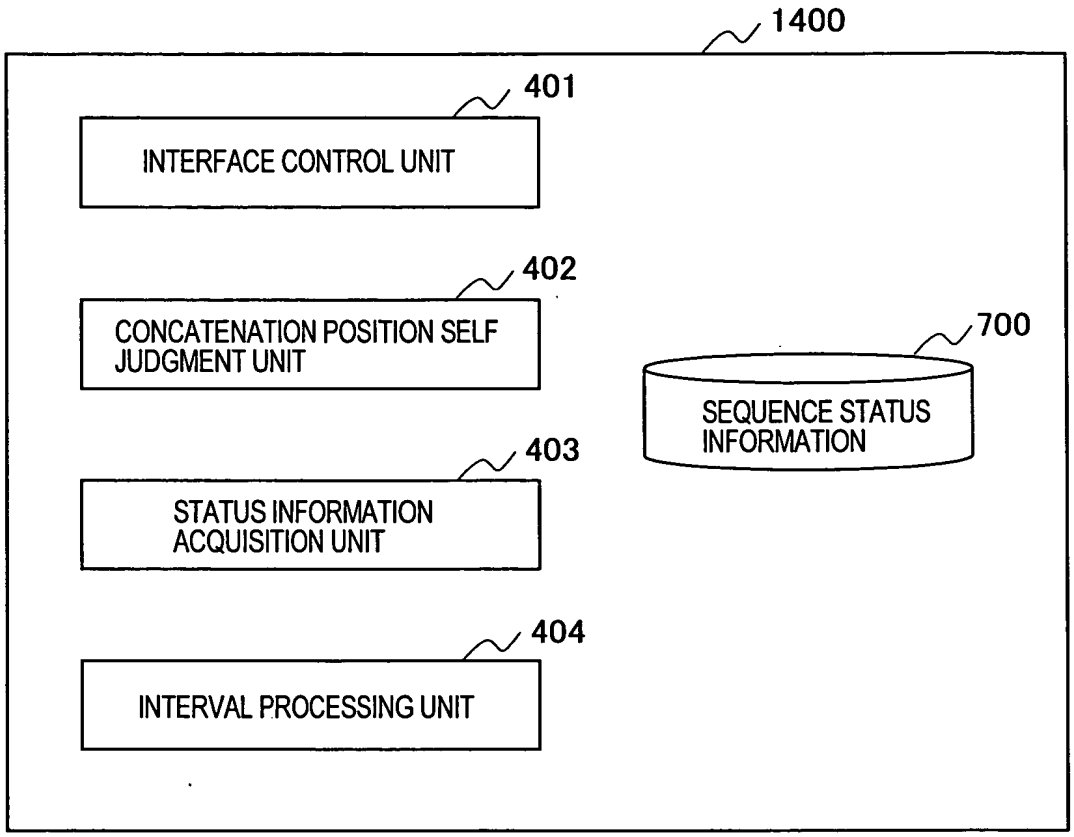

1400
401
INTERFACE CONTROL UNIT
402
CONCATENATION POSITION SELF JUDGMENT UNIT
403
STATUS INFORMATION ACQUISITION UNIT
404
INTERVAL PROCESSING UNIT
700
SEQUENCE STATUS INFORMATION

FIG.4

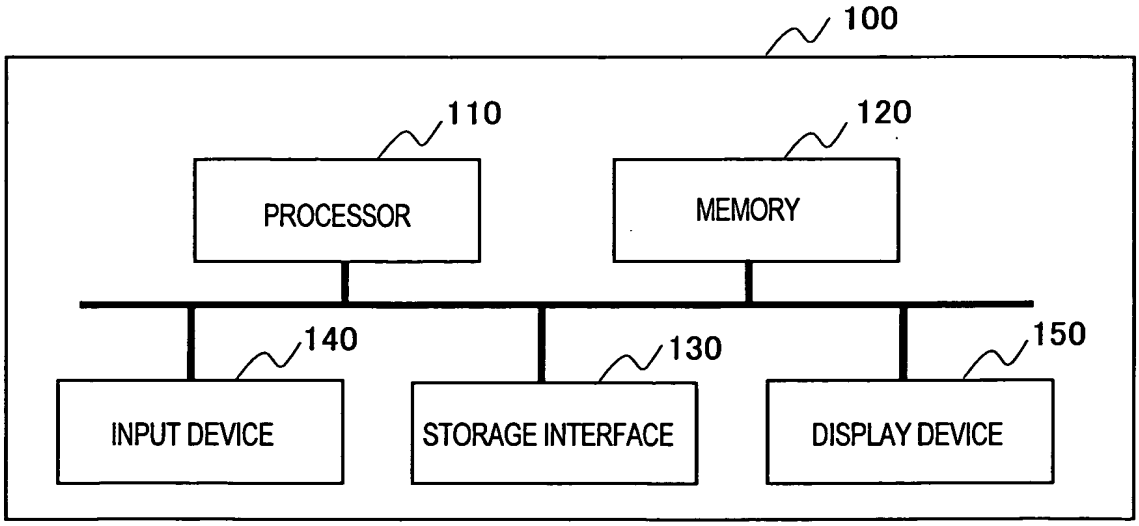

100
110
PROCESSOR
120
MEMORY
140
INPUT DEVICE
130
STORAGE INTERFACE
150
DISPLAY DEVICE

FIG.5

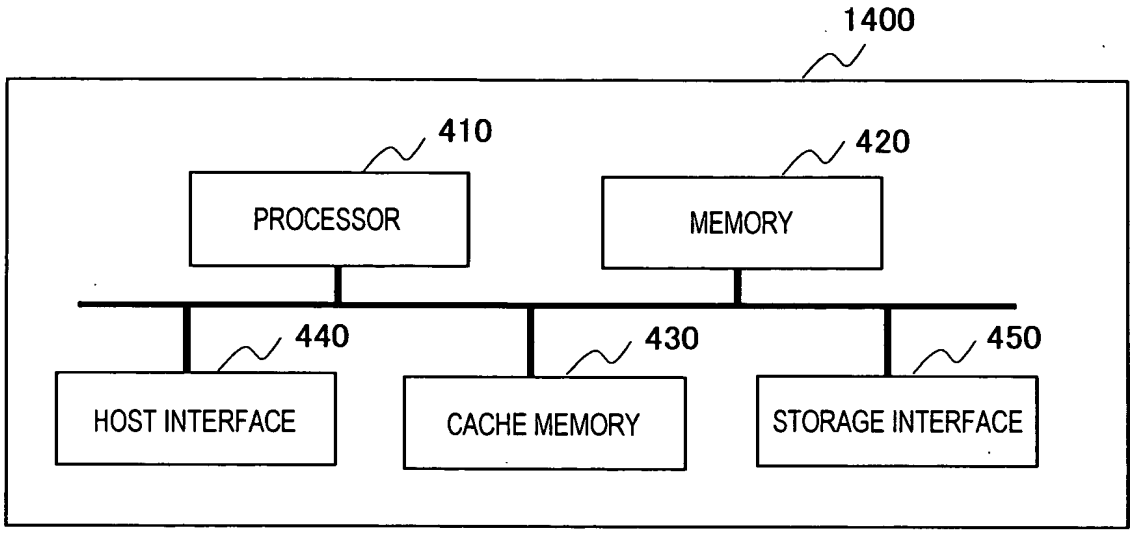


FIG.6

500

510	CONCATENATED STORAGE SITE NUMBER	6				
520	CONCATENATION ORDER INFORMATION	1	2	3	...	6
530	STORAGE SITE IDENTIFIER	1300A1	1300B1	1300C1		1300F1

FIG.7

600

610	STORAGE SUBSYSTEM NUMBER	7				
620	CONCATENATION ORDER INFORMATION	1	2	3	...	7
630	STORAGE SUBSYSTEM IDENTIFIER	1300A1	1300A2	1300A3		1300A7

FIG.8

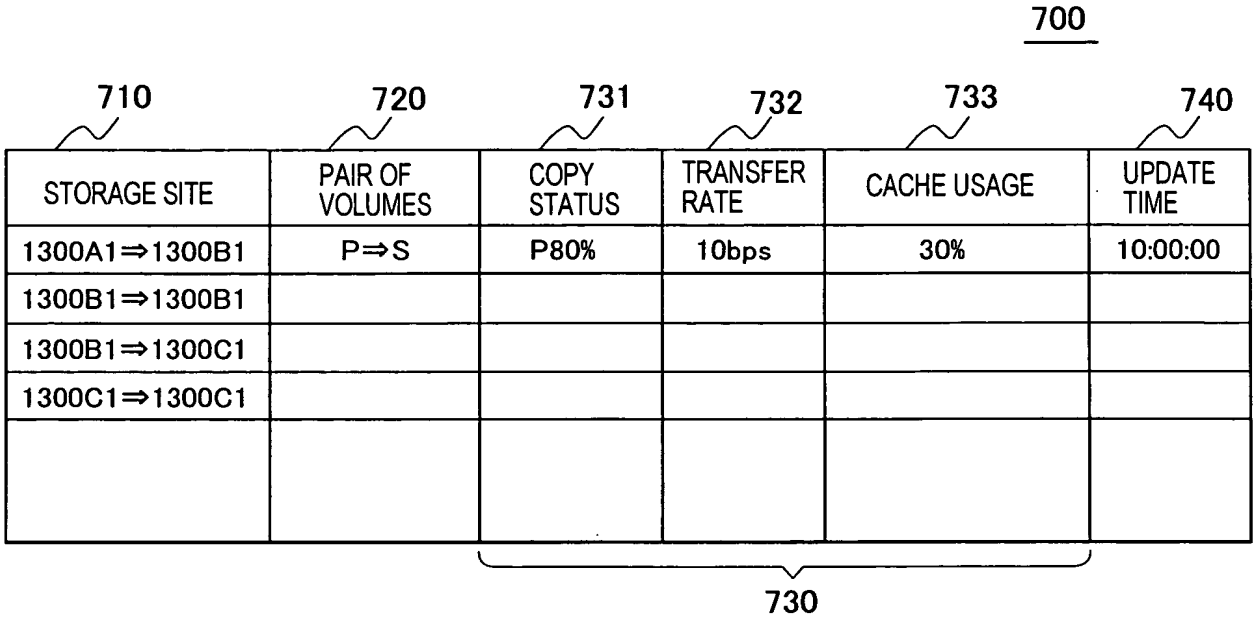


FIG.9

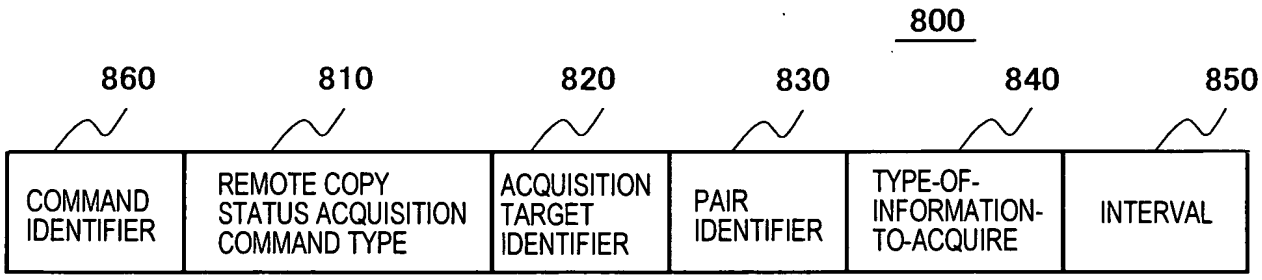


FIG.10

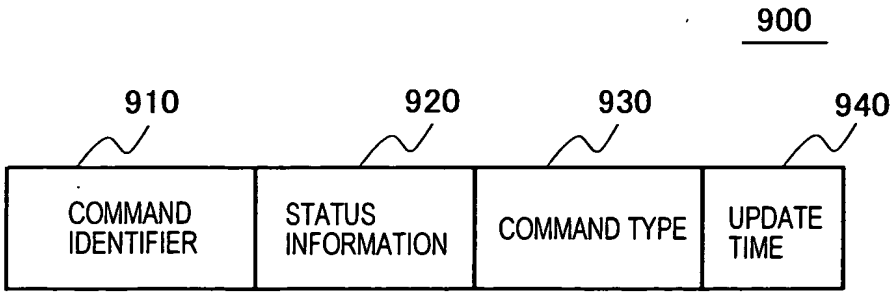


FIG.11

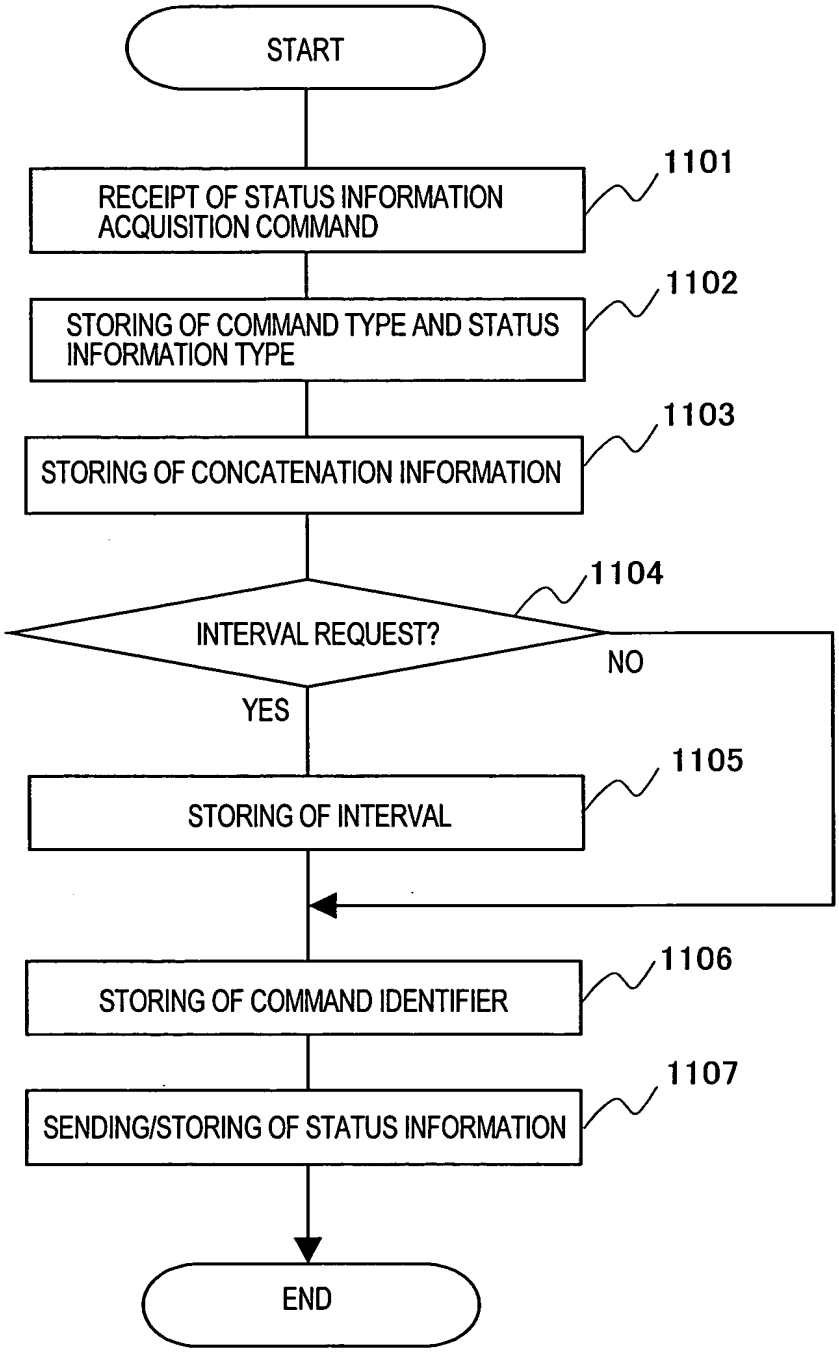

START
RECEIPT OF STATUS INFORMATION ACQUISITION COMMAND
1101
STORING OF COMMAND TYPE AND STATUS INFORMATION TYPE
1102
STORING OF CONCATENATION INFORMATION
1103
INTERVAL REQUEST?
1104
NO
YES
STORING OF INTERVAL
1105
STORING OF COMMAND IDENTIFIER
1106
SENDING/STORING OF STATUS INFORMATION
1107
END

FIG.12

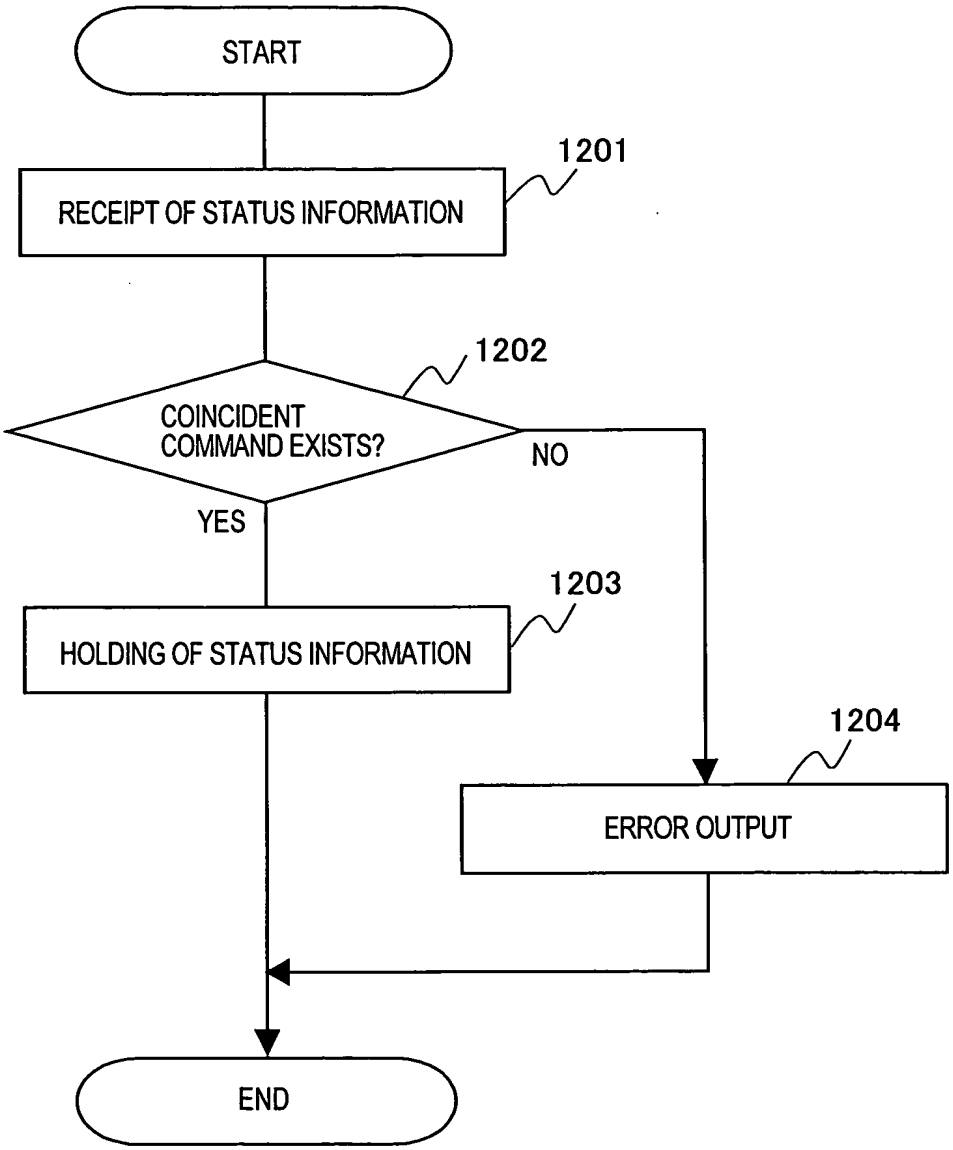

START
1201
RECEIPT OF STATUS INFORMATION
1202
COINCIDENT COMMAND EXISTS?
NO
YES
1203
HOLDING OF STATUS INFORMATION
1204
ERROR OUTPUT
END

FIG.13

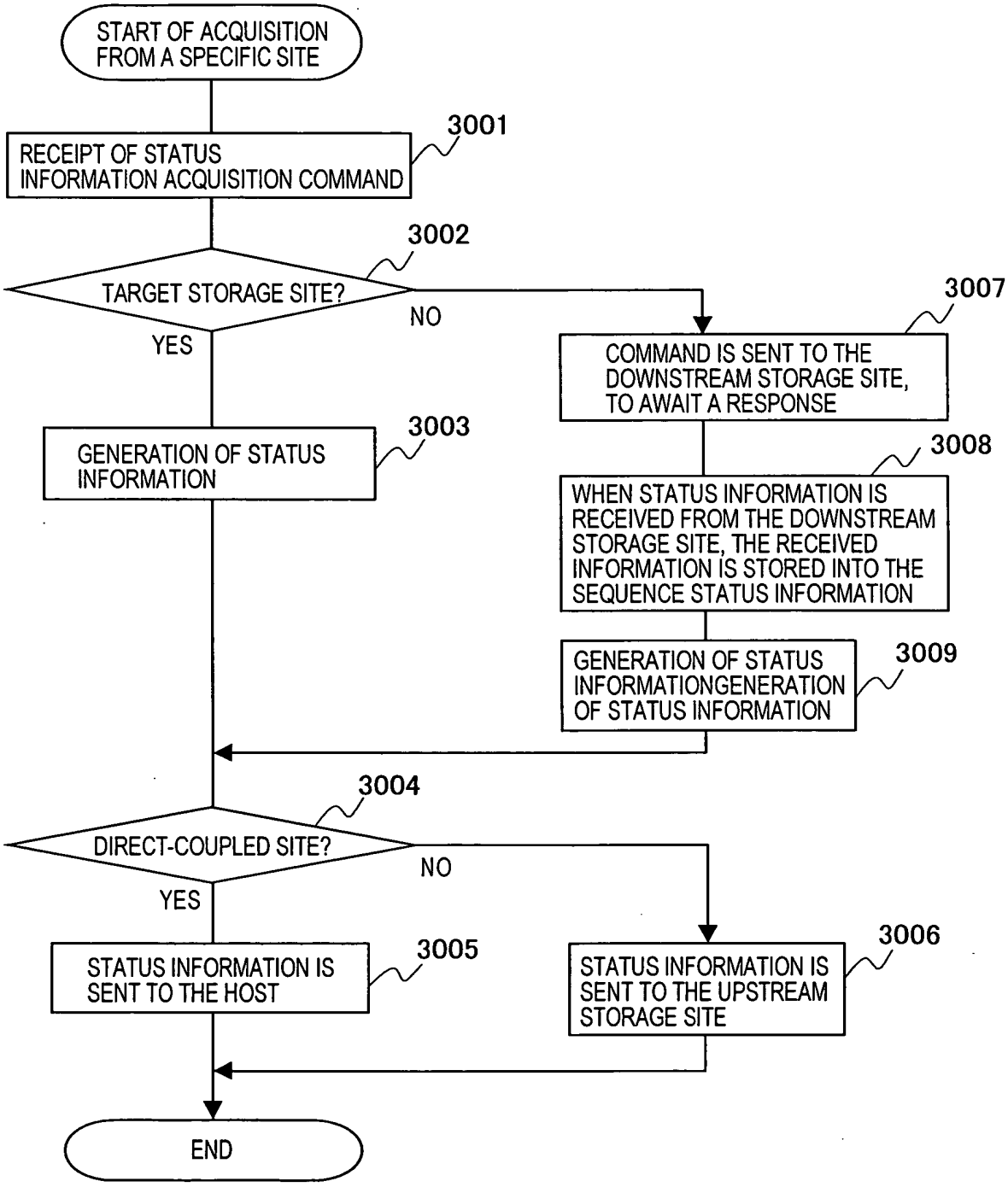

START OF ACQUISITION FROM A SPECIFIC SITE
RECEIPT OF STATUS INFORMATION ACQUISITION COMMAND
3001
TARGET STORAGE SITE?
3002
NO
YES
COMMAND IS SENT TO THE DOWNSTREAM STORAGE SITE, TO AWAIT A RESPONSE
3007
GENERATION OF STATUS INFORMATION
3003
WHEN STATUS INFORMATION IS RECEIVED FROM THE DOWNSTREAM STORAGE SITE, THE RECEIVED INFORMATION IS STORED INTO THE SEQUENCE STATUS INFORMATION
3008
GENERATION OF STATUS INFORMATIONGENERATION OF STATUS INFORMATION
3009
DIRECT-COUPLED SITE?
3004
NO
YES
STATUS INFORMATION IS SENT TO THE HOST
3005
STATUS INFORMATION IS SENT TO THE UPSTREAM STORAGE SITE
3006
END

FIG.14

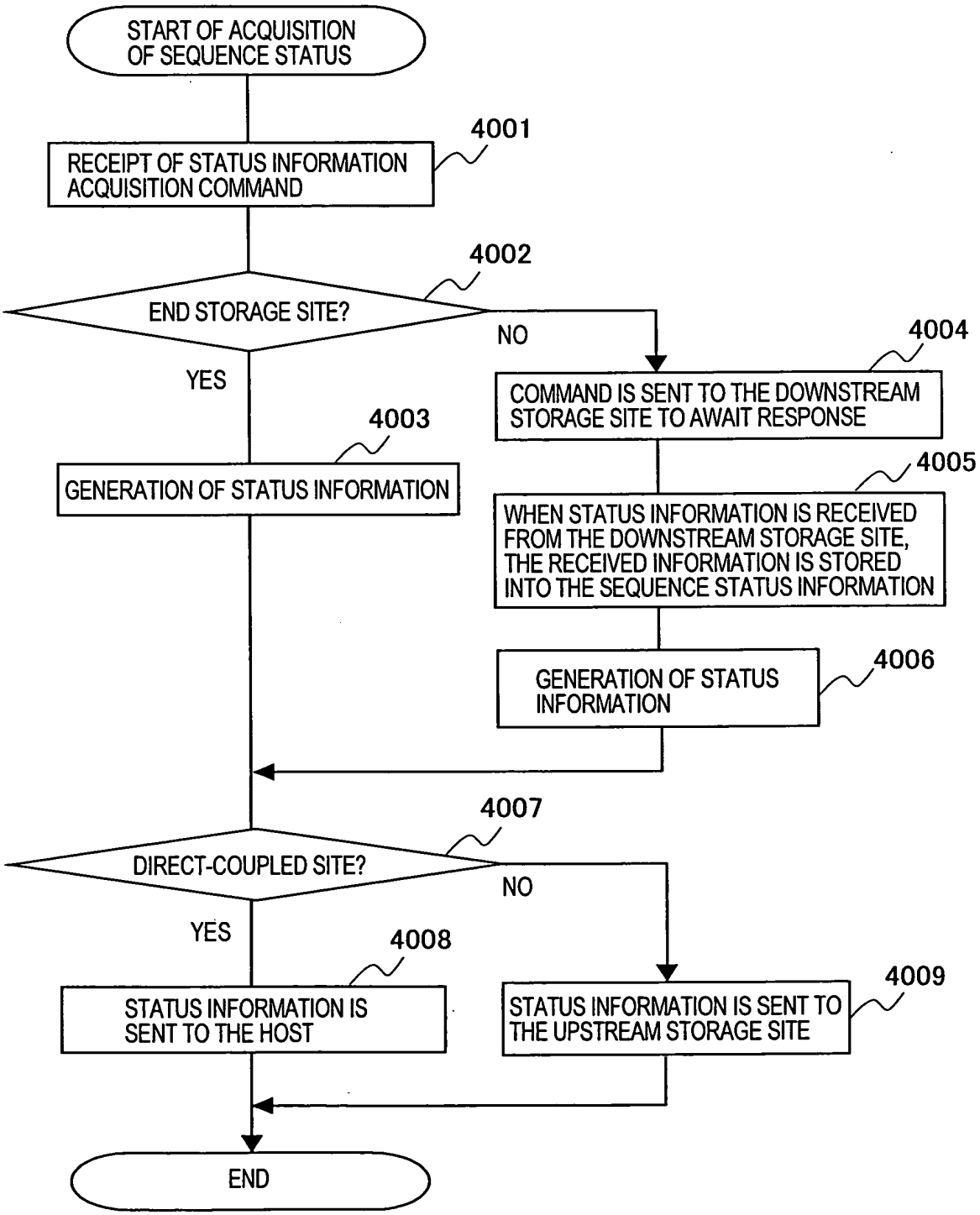

START OF ACQUISITION OF SEQUENCE STATUS
4001
RECEIPT OF STATUS INFORMATION ACQUISITION COMMAND
4002
END STORAGE SITE?
NO
YES
4004
COMMAND IS SENT TO THE DOWNSTREAM STORAGE SITE TO AWAIT RESPONSE
4003
GENERATION OF STATUS INFORMATION
4005
WHEN STATUS INFORMATION IS RECEIVED FROM THE DOWNSTREAM STORAGE SITE, THE RECEIVED INFORMATION IS STORED INTO THE SEQUENCE STATUS INFORMATION
GENERATION OF STATUS INFORMATION
4006
4007
DIRECT-COUPLED SITE?
NO
YES
4008
STATUS INFORMATION IS SENT TO THE HOST
STATUS INFORMATION IS SENT TO THE UPSTREAM STORAGE SITE
4009
END

FIG.15

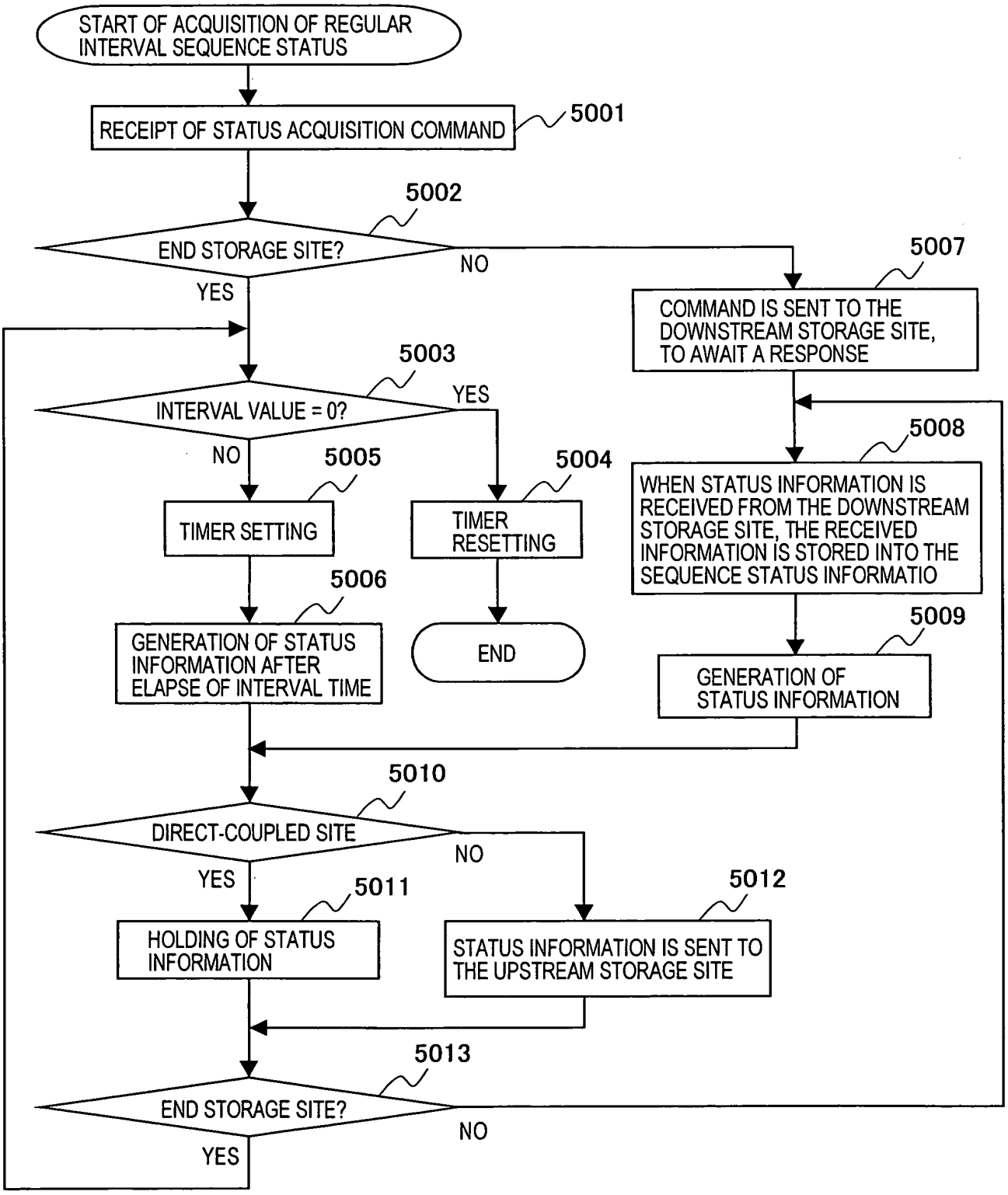
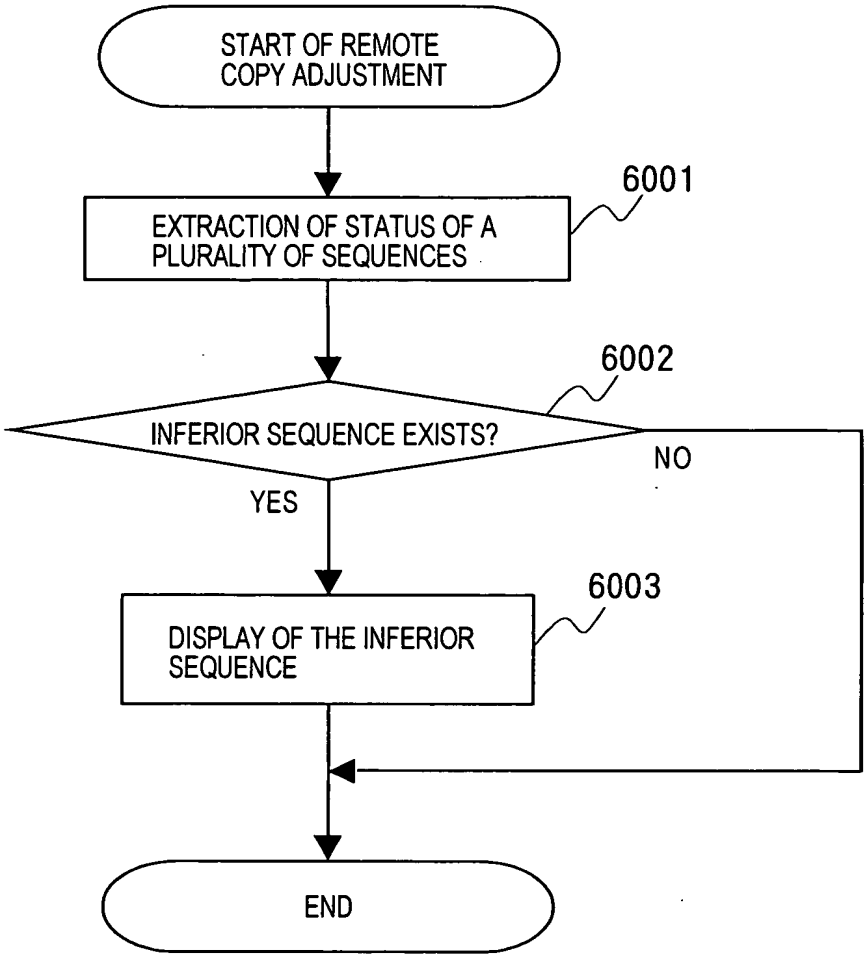

START OF ACQUISITION OF REGULAR INTERVAL SEQUENCE STATUS
RECEIPT OF STATUS ACQUISITION COMMAND
5001
5002
END STORAGE SITE?
NO
YES
5007
COMMAND IS SENT TO THE DOWNSTREAM STORAGE SITE, TO AWAIT A RESPONSE
5003
INTERVAL VALUE = 0?
YES
NO
5005
TIMER SETTING
5004
TIMER RESETTING
5008
WHEN STATUS INFORMATION IS RECEIVED FROM THE DOWNSTREAM STORAGE SITE, THE RECEIVED INFORMATION IS STORED INTO THE SEQUENCE STATUS INFORMATIO
5006
GENERATION OF STATUS INFORMATION AFTER ELAPSE OF INTERVAL TIME
END
5009
GENERATION OF STATUS INFORMATION
5010
DIRECT-COUPLED SITE
NO
YES
5011
HOLDING OF STATUS INFORMATION
5012
STATUS INFORMATION IS SENT TO THE UPSTREAM STORAGE SITE
5013
END STORAGE SITE?
NO
YES

FIG.16


START OF REMOTE COPY ADJUSTMENT
6001
EXTRACTION OF STATUS OF A PLURALITY OF SEQUENCES
6002
INFERIOR SEQUENCE EXISTS?
NO
YES
6003
DISPLAY OF THE INFERIOR SEQUENCE
END